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(54) NOVEL STIMULATION FACTOR FOR HUMAN GRANULOCYTE  
MACROPHAGE COLONY

(57)Abstract:

NEW MATERIAL: A human granulocyte macrophage colony stimulation factor specified by an amino acid sequence of from the 8th to the 128th amino acids in the amino acid sequence of formula (-S-S- bonds are present between the 55th and the 97th cysteines and between the 89th and the 122nd cysteines).

USE: A remedy for infectious diseases and immune-activation agent.

PREPARATION: For example, a plasmid having a gene of human granulocyte macrophage

colony stimulation factor(hGM-CSF) originated from human leukemia cell U937 strain (ATCC CRL 1593) is introduced into SG936 strain originated from E.coli K-12 strain to transform the E.coli. The transformed E.coli is cultured to obtain a reduced hGM-CSF. The product is oxidized with a redox system such as glutathione to form a two sets of disulfide bonds and obtain the objective hGM-CSF having the amino acid sequence corresponding to the 8th - 128th amino acids in the amino acid sequence of formula.

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